

OREGON STATE FIRE MARSHAL
Fire & Life Safety Services
TECHNICAL INFORMATION BULLETIN #9

“Medical Gas System Inspection, Testing, and Maintenance”

It shall be the responsibility of the facility owner and/or facility occupant to have all medical gas systems and equipment inspected, tested, and maintained in accordance with adopted nationally recognized standards and state regulations. *OUFC 1001.5.2* and *Article 74*. Refer to Technical Information Bulletin #8 for who is deemed qualified by the Office of State Fire Marshal.

NOTE: All health care facilities (hospitals, nursing facilities, ambulatory surgical centers, medical office buildings, etc.) fall within the scope of this Technical Information Bulletin.

Medical gas systems and equipment shall be inspected, tested, and maintained in accordance with NFPA 99 *Standard for Health Care Facilities*, 1999 Edition.

1. As a minimum, all health care facilities shall maintain, on-site, written documentation of all inspections, tests, and maintenance available for review by the fire marshal during inspections.
2. Refer to the table included in this technical bulletin for intervals and recommended actions. These are to be considered as minimum only. Manufacturer’s instructions and other nationally recognized standards may also apply and are to be considered part of the requirement of this technical bulletin.

NOTE: The intervals recommended on the attached table are non-required and recommendations only. If facilities have developed their own policies and practices that are consistent with the intent of NFPA 99, said policies and practices are deemed equivalent to those recommended in the table.

T.I.B. #9 ~ “Medical Gas System Inspection, Testing, and Maintenance”

Appendix C, Section C-4.2 *Re-testing and Maintenance of Nonflammable Medical Piped Gas Systems*

Interval	Recommended Inspection, Test and/or Maintenance
Daily	<ol style="list-style-type: none"> 1. Check system to ensure proper pressure. 2. Test to ensure that the changeover signal has not malfunctioned. 3. Check the supply system to ensure that medical gas is re-ordered when the contents gauge drops to the re-order level designated by the supplier. 4. Check the main-line pressure gauge for proper pressure; investigate and correct variations as necessary. 5. Check the medical air compressor receiver drain for excessive condensed water buildup.
Monthly	<ol style="list-style-type: none"> 1. Check gauges for gradual variations from “normal” and report to the supplier. 2. Test audible and visual signals using test buttons. 3. Test audible and visual signal warning systems for high-pressure or liquid reserve systems using test buttons.
Quarterly	<ol style="list-style-type: none"> 1. Check medical compressor air intake to ensure it is a continued satisfactory source.
Annually	<ol style="list-style-type: none"> 1. Test the operation of the reserve and activation of the reserve-in-use signal. 2. Test the actuating switch and monitoring signal of reserve supply systems. 3. Check the pressure gauge and high-water-level sensor for function of medical air compressor systems. 4. Check the dew point sensor for function of medical air compressor systems. 5. Check calibration of analytical equipment and instrumentation of medical air compressor systems. Re-calibrate as necessary. 6. Test all components of the signal warning systems for high-pressure or liquid reserve systems. 7. Test medical compressed air system alarms. 8. Test all warning system components. 9. Test the master signal panel system. Have the supplier re-adjust bulk supply controls if necessary to complete tests.
As recommended by the manufacturer, but no less frequently than every 36 months	<ol style="list-style-type: none"> 1. Medical air compressor adsorber beds, and all system components. 2. Check station outlets for leakage and flow. 3. Check shutoff valves for external leakage with a test solution that is safe for use with oxygen. 4. Check station outlets for leakage and flow in accordance with the manufacturer’s instructions.